

POLYMERIC STABILIZATION COMPOSITION AND METHOD**Abstract of the Disclosure**

Embodiments of the present invention are methods and chemical compositions of
5 polymers and crosslinking agents that are particularly suited to aggregate, including soil and other
natural aggregates, stabilization via hydraulic application. The present invention is an
improvement over existing methods as it provides effective stabilization for longer periods. The
compositions, when in an aqueous solution and applied to soil or aggregate surfaces, penetrate
the surface polymerize and form a crosslinked polymer film. Individual aggregate particles may
10 bind to the polymer or may be entrapped by the polymer film. In the environment, the film is
substantially resistant, in the near term, to bio-degradation and natural, physical degradation due
to weathering and exposure. The resultant polymer film and aggregate or bonded fiber matrix
resists erosion by strong wind and heavy rain but readily allows seeds to germinate and grow.
The crosslinked film is also substantially insoluble but nevertheless is biodegradable over the
15 long term, ultimately decaying into harmless products. In addition a procedure for control of
viscosity in the field application is described making possible cost savings by reducing the
amount of required water for delivery.